



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,632	09/05/2006	Martyn Vincent Twigg	JMYT-370US	3293
23122	7590	05/07/2009		
RATNERPRESTIA			EXAMINER	
P.O. BOX 980			TAKEUCHI, YOSHITOSHI	
VALLEY FORGE, PA 19482				
			ART UNIT	PAPER NUMBER
			1793	
			MAIL DATE	DELIVERY MODE
			05/07/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/591,632

Applicant(s)

TWIGG, MARTYN VINCENT

Examiner

YOSHITOSHI TAKEUCHI

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2009.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10, 15, 16 and 18-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8, 10, 15, 16 and 18-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 05 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. Claims 1-8, 10, 15-16, and 18-24 are presented for examination, wherein all the claims were previously presented.
3. The previous rejections of claims 1, 3, 5, 7, and 18-23 as being anticipated by Foerster et al. (US 6,149,973) are withdrawn as a result of the applicant's arguments.

Claim Rejections - 35 USC § 103

4. The text of those sections of the Title 35 U.S. Code not included in this section can be found in a prior Office action.
5. Claims **1-8, 10, 15, 16, and 18-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Foerster et al (US 6,149,973).

Foerster is applied to the claims 1-8, 10, 15, 16, and 18-23 for the same reasons stated in the previous Office action.

5. Claim **24** is rejected under 35 U.S.C. 103(a) as being unpatentable over Foerster et al (US 6,149,973) in view of Ogawa et al (US 5,733,352)

Foerster suggests the method of claim 15 with a ceramic catalyst carrier (Column 1, lines 28-34), but Foerster does not teach the ceramic filter made of a thermet, wherein the thermet is selected from a group consisting of $\text{Al}_2\text{O}_3/\text{Fe}$, $\text{Al}_2\text{O}_3/\text{Ni}$ and $\text{B}_4\text{C}/\text{Fe}$.

Ogawa teaches a honeycomb structure having a porous cell wall used to form a diesel particulate filter (abstract), wherein the material is a thermet such as $\text{Al}_2\text{O}_3/\text{Fe}$, $\text{Al}_2\text{O}_3/\text{Ni}$ and $\text{B}_4\text{C}/\text{Fe}$ (column 4, lines 29-30).

As a result, it would have been obvious to a person of ordinary skill at the time of the invention to make the filter taught by Foerster with the filler material taught by Ogawa, since Ogawa teaches filter with specific filler material that is inert, an important characteristic for the Foerster filter filler material, since the filler material is a vehicle for carrying the catalyst, and should not react.

Response to Arguments

6. The applicant makes the following six arguments:
 - a. First, the applicant argues "Foerster never expressly discloses or contemplates a wall-flow filter, let alone a wall-flow filter which has evacuated channel walls" (response to Office action, p.7) since "Foerster discloses a honeycomb flow-through catalyst in which the catalyst flows along the length of the channels" (id, emphasis in the response to Office action) instead of across the walls.

In response, the examiner rejected claims 1, 3, 5, 7, 18-23 under 35 U.S.C. §§ 102(b) and 103(a). While this argument overcomes the § 102(b) rejection, it does not overcome the § 103(a) rejection.

The Foerster patent contemplates a wall-flow filter for the reasons provided in the prior Office action. As the applicant notes in the specification, "[a] typical wall-flow filter has a shape of a honeycomb, [wherein] a flowing exhaust gas stream passing through the

cells..." (emphasis added). A wall-flow meter is not limited to only having gas flow across the walls, since the embodiment described in the specification is only "typical."

b. Second, the applicant argues "Foerster never indicates that the vacuum step may be applied first, namely as a discrete step before then step of contacting the substrate with a liquid." (id, emphasis in the response to Office action).

In response, the claims do not require a vacuum step as a discrete step applied prior to contacting the substrate with a liquid. Foerster teaches the steps (a) and (b). The selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results. See *In re Burhans*, 154 F.2d 690 (CCPA 1946). See also MPEP § 2144.04(IV)(C).

c. Third, the applicant argues the Foerster patent would not work as a wall-flow meter, since "the walls for a honeycomb carrier are essentially impermeable to the flowing gas."

In response, please refer to the reply to the first argument.

d. Fourth, the applicant argues Foerster teaches away from the claimed invention by stating the mechanism of the filtration is different from the instant invention.

In response, the instant invention does not claim the mechanism, but rather teaches a method of manufacturing, wherein the steps are not interlinked so as to require specific steps prior to other steps.

e. Fifth, the applicant argues for claim 2 that Foerster teaches away from reapplying the coating.

f. In response, as Foerster teaches it is "possible to apply the entire quantity of coating...in a single operational cycle" and "[m]ultiple coatings...should be avoided" (column 2, lines 24-31). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments. *Merek & Co. v. Biocraft Laboratories*, 874 F.2d 804 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See MPEP § 2123.

g. Sixth, the applicant argues for claim 24 that the subject matter of Twigg et al (WO 2004/079167) and the claimed invention were commonly owned at the time of the invention.

In response, please find attached the revised rejection to claim 24 *supra*.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSHITOSHI TAKEUCHI whose telephone number is (571) 270-5828. The examiner can normally be reached on Monday-Thursday 9:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/
Supervisory Patent Examiner, Art Unit
1793

/YOSHITOSHI TAKEUCHI/
Examiner, Art Unit 1793